



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Naohide FUWA et al.

Application No.: 10/664,914

Filed: September 22, 2003 Docket No.: 116642

INTERNAL COMBUSTION ENGINE HAVING VARIABLE VALVE ACTUATION For:

DEVICE AND METHOD OF CALCULATING INTAKE AMOUNT IN THE SAME

INTERNAL COMBUSTION ENGINE

## **INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- $\boxtimes$ This Information Disclosure Statement is being filed (a) within three months of 1. the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- $\boxtimes$ Relevance of the non-English language reference 2 is discussed in the present specification.
- $\boxtimes$ The present application was filed or entered the U.S. National Stage of the PCT after June 30, 2003. In accordance with the June 11, 2003, Notice waiving the requirements of 37 C.F.R. §1.98(a)(2)(i), copies of any U.S. patents and patent application publications are not attached.
- $\boxtimes$ A concise explanation of the relevance of references 2-3 appears in the Appendix attached hereto.

- 5. English-language Abstracts of the non-English language references 2 and 3 are attached hereto.
- 6. A computer-generated English translation of the following Japanese Patent Publications have been obtained from the website of the Japanese Patent Office ([http://www.jpo.go.jp]), and are attached, but have not been reviewed for accuracy. See References 2 and 3.

Respectfully submitted,

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JAO:JSA/emt

Date: December 22, 2003

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Form PTO-1449 US Dept. of Commerce (REV. 8-83)		ATTY DOCKET NO. 116642			APPLICATION NO. 10/664,914			
INFORMATION DISCLOSURE STATEMENT					İ			
(Use several sheets if necessary)			APPLICANTS Naohide FUWA et al.					
			FILING DATE September 22, 2003					
	1	U.S.	PATI	ENT DOCU	JMENTS	- 1		
EXAMINER INITIAL		DOCUMENT NUMBER		DATE	NAME		CLASS	SUB CLASS
	1	US 6,328,007 B1	12/	11/2001	Hirasawa et al.			
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FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER		DATE	COUNTI	RY	CLASS	SUB CLASS
	2	JP A 2001-159323 w/abstr. + trans.	06/	12/2001	Japan			
	3	JP A 2000-80952 w/abstr. + trans.	03/	21/2000	Japan			
		OTHER DOCUMENTS (Inc	cludir	ng Author,	Title, Date, Pertinent Page	es, etc.)		
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		f citation considered, whether or not citation and not considered. Include copy of					through citati	on if not in

Date: December 22, 2003

## APPENDIX

## List of Related Art for IDS

Document Name (Patent Publication)	Filing Date	Publication Date	Comments
US6328007	2000/8/7	2001/12/11	
JP-A-2001-159323	1999/12/2	2001/6/12	The cylinder intake amount is calculated by multiplying the maximum capacity intake amount with a coefficient determined from the closing timing of the intake valve and the engine speed
JP-A-2000-80952	1998/9/4	2000/3/21	The cylinder intake amount for the next cycle is estimated by adding an amount of change in the target cylinder intake amount to the cylinder intake amount detected by the airflow meter during the last cycle